

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re Patent Application of:   | ) Confirmation No.: 6925 |
| Shigeki IMAI et al.            | ) Examiner: Chris H. Chu |
| Serial No. 10/649,661          | ) Group Art Unit: 2874   |
| Filed: August 28, 2003         | )                        |
| For: ELECTRONIC CIRCUIT DEVICE | )                        |

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Honorable Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The present *Request* is filed pursuant to the provisions of the Pre-Appeal Brief Conference Pilot Program (1296 Off. Gaz. Pat. Office 67 (July 12, 2005); extended January 10, 2006). The Final Official Action mailed May 13, 2009, and the Advisory Action mailed September 30, 2009, have been received and their contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time*, which extends the shortened statutory period for response to October 10, 2006. Also, filed concurrently herewith is a *Notice of Appeal*. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. The review is requested for the following reasons.

The Final Official Action and Advisory Action include improper rejections, errors in fact and omissions of essential elements required to establish a *prima facie* rejection.

As a procedural matter, the Advisory Action is believed improper and premature. The Advisory Action newly lists U.S. Patent No. 5,919,253 to Schneider, U.S. Publication No. 2001/0035779 to Ohno and U.S. Patent No. 6,285,230 to Na; however,

these references have not been made of record by the Examiner on a Form PTO-892 and were not previously made of record by the Applicant on a Form PTO-1449. As such, the record is not clear as to whether these references are of record, whether the Examiner is asserting that the claims are obvious based on U.S. Patent No. 5,268,679 to Shannon alone, or whether the Examiner is asserting that the claims are obvious based on an alleged combination of Shannon, Schneider, Ohno and Na. For at least this reason alone, the Final Official Action and subsequent Advisory Action are improper and premature. The Applicant respectfully requests that prosecution be reopened and that a Notice of Allowance be issued in light of the arguments of record and presented below.

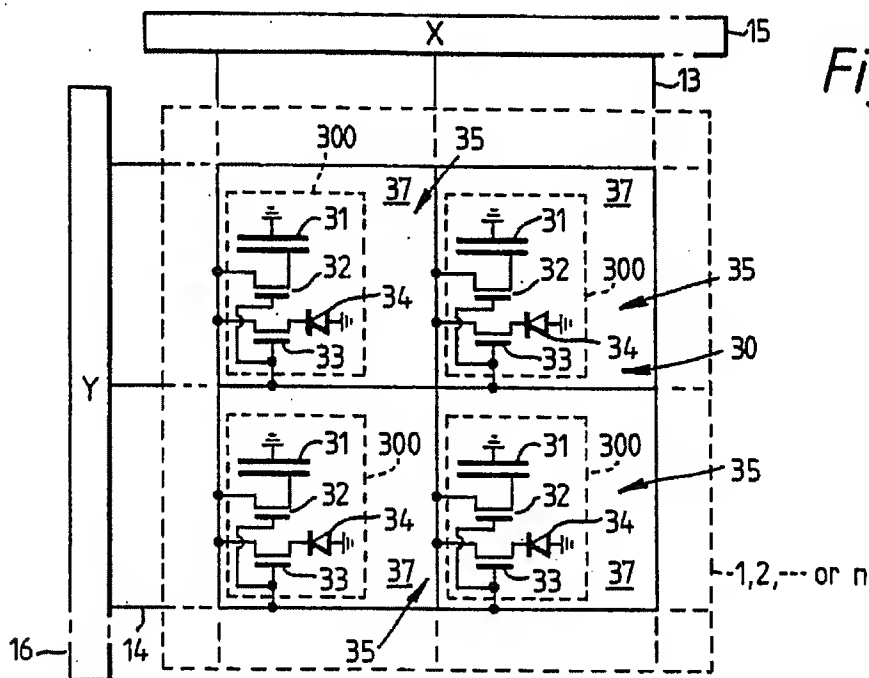
The Advisory Action asserts that "using a buffer in the electronic circuit device of Shannon ... is indeed shown to be well known in the art by [Schneider, Ohno and Na]" and that "one having ordinary skill in the art would have found it obvious to connect a buffer to the photodiode 34 of Shannon so that the electronic signal generated by the photodiode is transmitted to the electronic circuit through the buffer in order for the circuit to perform more effectively" (page 2, Paper No. 20090903). The Applicant respectfully disagrees and traverses the assertions in the Official Action.

Shannon, Schneider, Ohno and Na, either alone or in combination, do not teach or suggest an optical sensor connected to an electric source through a thin film transistor, and connected to a buffer, and that an electronic signal is inputted into an electronic circuit through the buffer. Also, the prior art does not teach or suggest why one of ordinary skill in the art at the time of the present invention would, upon reading Schneider, Ohno and Na, have had any reason to make the specific modification (connect a buffer to a photodiode so that an electronic signal generated by the photodiode is transmitted to an electronic circuit through the buffer) to the structure shown in Figure 3 of Shannon as proposed by the Examiner.

Shannon merely discloses the following (column 5, lines 28-42; emphasis added):

Each photosensitive diode 34 is arranged, in the example shown in FIG. 3, to detect light incident on the associated matrix cell 35 and, when the gate of the associated switching element 33 is addressed, to supply a voltage signal to the associated column line 13, via the switching element 33. Thus when the gates of the switching elements 32 and 33 associated with a particular matrix cell 35 are addressed by the Y control/addressing circuit 16 via the associated row line 14, any voltage supplied by the X control/addressing circuit 15 and/or via the light sensed by the photosensitive diode 34 is supplied to the liquid crystal element 31 of that matrix cell 35, via the associated switching element 32, to modify the light transmission properties of the liquid crystal element 31.

That is, voltage via the light sensed by the photosensitive diode 34 is only supplied to the liquid crystal element 31 in the same matrix cell 35 as the photosensitive diode 34" (see Figure 3). As such, Shannon does not appear to require a buffer. Also, the Official Action has not demonstrated how adding a buffer to Figure 3 of Schneider would necessarily make Shannon "perform more effectively."



*Fig. 3.*

Schneider, Ohno and Na do not cure the deficiencies in Shannon; do not teach why the structure shown in Figure 3 of Shannon, requires a buffer; and do not teach

how one of ordinary skill in the art at the time of the present invention would have incorporated a buffer into the structure shown in Figure 3 of Shannon. The Advisory Action asserts that Schneider "discloses an inverter buffer circuit between the input and the output of an electronic circuit in order to maximize the flexibility of the circuit with respect to current magnitude and impedance matching," that "Ohno discloses a buffer connected to an output provided for suppressing peak current" and that "Na discloses a buffer circuit which compensates for a data hold time and reduces an operational current" (page 2, Paper No. 20090903). However, none of these references teach or suggest why one of ordinary skill in the art at the time of the present invention would have necessarily added the buffer circuit of Schneider, Ohno or Na to Shannon so that an optical sensor is connected to an electric source through a thin film transistor, and connected to a buffer, and that an electronic signal is inputted into an electronic circuit through the buffer.

Also, Schneider, Ohno and Na do not teach or suggest that it is obvious to add a buffer to every electronic device. Rather, they disclose the use of a buffer for a specific purpose. For instance, in Schneider, the "second inverter buffer pair 78 and 80 are provided between the pull-up input 64 and the transfer gate in order to provide a suitable charge current for the gate of the pull-up transistor 52" (column 9, lines 11-14); however, this disclosure does not instruct one of ordinary skill in the art to add a buffer to the structure shown in Figure 3 of Shannon. The same is true of the low-noise buffer circuit of Ohno (paragraph [0004]) and the buffer circuit of Na (abstract).

Further, Schneider, Ohno and Na are not at all concerned with optical sensors. Schneider, Ohno and Na are not in the field of the Applicant's endeavor, are not reasonably pertinent to the particular problem with which the inventor is concerned, and would not have logically commended themselves to an inventor's attention in considering the problem (see MPEP § 2141.01(a)).

Therefore, the Applicant respectfully submits that the Official Action has not provided a proper or sufficient reason, either in the references themselves or in the

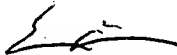
knowledge generally available to one of ordinary skill in the art, to modify Shannon, Schneider, Ohno and Na or to combine reference teachings to achieve the claimed invention.

Therefore, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 are in order and respectfully requested. Since the Official Action has not presented a *prima facie* rejection, at the very least, the Examiner's arguments are not suitable for appellate review. The Applicant respectfully requests that the present application be allowed on the existing claims pursuant to the provisions of the Pre-Appeal Brief Conference Pilot Program (1296 Off. Gaz. Pat. Office 67 (July 12, 2005); extended January 10, 2006).

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Respectfully submitted,



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Eric J. Robinson  
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.  
PMB 955  
21010 Southbank Street  
Potomac Falls, Virginia 20165  
(571) 434-6789